### (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 24 February 2005 (24.02.2005)

**PCT** 

### (10) International Publication Number WO 2005/016799 A3

(51) International Patent Classification7: 17/32

B65G 47/90,

(21) International Application Number:

PCT/NL2004/000580

(22) International Filing Date: 16 August 2004 (16.08.2004)

(25) Filing Language:

(26) Publication Language:

English

(30) Priority Data:

03077601.7

18 August 2003 (18.08.2003)

(71) Applicant (for all designated States except US): FPS FOOD PROCESSING SYSTEMS B.V. [NL/NL]; Burg. G.J.F. Tijdemanstraat 13, NL-2631 RE Nootdorp (NL).

(72) Inventors; and

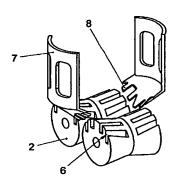
(75) Inventors/Applicants (for US only): VAN DEN BERG, Wouter [NL/NL]; Populierendreef 238, NL-2272 HA Voorburg (NL). BRASKAMP, Michiel [NL/NL]; p/a

Burg. Winkellaan 3, NL-2631 HG Nootdorp (NL). VAN WLJNGAARDEN, Erik [NL/NL]; C. Voorberghstraat 108, NL-7558 WL Hengelo (NL).

- (74) Agent: WINCKELS, J., H., F.; Vereenigde, Johan de Wittlaan 7, NL-2517 JR Den Haag (NL).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: APPARATUS FOR CONVEYING OBJECTS



(57) Abstract: Apparatus for conveying objects (1), for instance fruits, comprising - a first endless conveyor, with conveying elements (2) such as diabolos connected thereto, while a conveying position is defined between at least two conveying elements, one of which downstream and the other upstream, viewed in the direction of travel of the conveyor, and - a second endless conveyor, with product carriers connected thereto, comprising gripper hands (7), for transferring objects from between the conveying elements, the second conveyor being provided in the direct proximity of the first conveyor, wherein at least in the surfaces supporting the objects at the moment of transfer, the conveying elements comprise grooves (4) in a direction perpendicular to the conveyor, and said gripper hand has fingers (8), while the distance between the fingers corresponds to the distance between the grooves of the conveying elements such that upon transfer of the objects by said gripper hand the fingers are positioned at least partly under the objects in the groove ends (6) of the grooves.



## WO 2005/016799 A3



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### Published:

with international search report

(88) Date of publication of the international search report: 7 April 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.